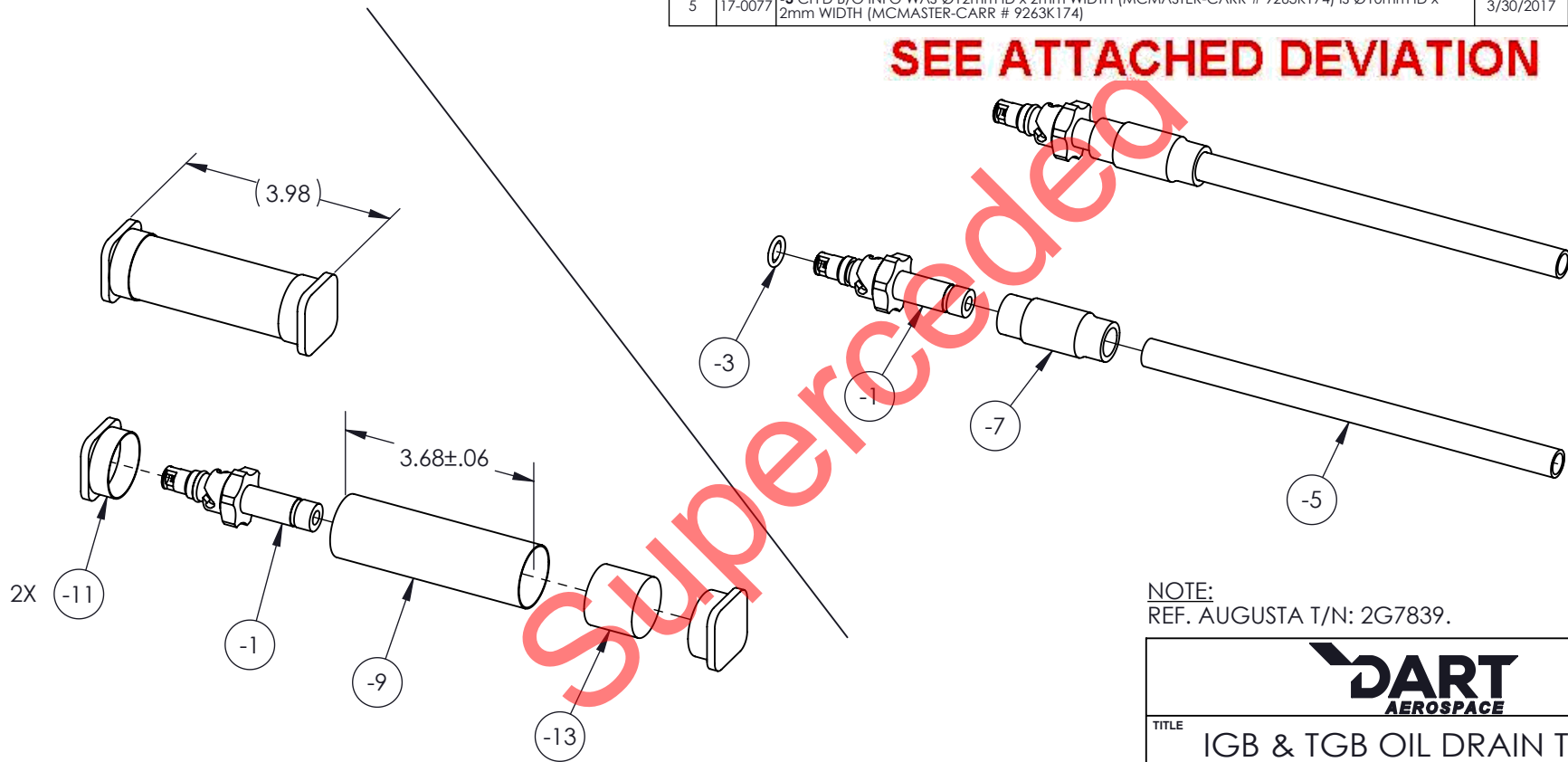


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**UNDER REVIEW**  
URF 19-583 19.02.13 (VM)



**SEE ATTACHED DEVIATION**

NOTE:  
REF. AUGUSTA T/N: 2G7839.

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			-1	1	QUILL	6061		2
		B/O	-3	1	O-RING	VITON	Ø10mm ID X 2mm WIDTH (MCMaster-CARR # 9263K174)	1
		B/O	-5	1	HOSE	VINYL	Ø1/2 O.D. x Ø3/8 I.D. x 6ft (KURI-TECH #K010-0608)	1
		B/O	-7	1	COUPLING	NICKEL-PLATED BRASS	Ø1/2 (MCMaster-CARR #51495K116)	1
		B/O	-9	1	TUBE	POLYETHYLENE	Ø1.09 (MCMaster-CARR #2044T47)	1
		B/O	-11	2	CAP	VINYL	Ø1.09 (MCMaster-CARR #2044T67)	1
		B/O	-13	1	FOAM	POLYESTER/POLYURETHANE	Ø1 X 1 (NEW PIG CORP. #PAD210)	1

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CH'D TITLEBLOCK & REV BLOCK, CH'D T/N FROM RBW7839, CH'D INK STAMP NOTE, -1 CH'D ANGLE OF GROOVE PER G.E.	8/20/2009	RJC	RW
1A		CH'D TOOL NAME FROM MAIN GEAR BOX DRAIN TOOL PER E.B.	11/28/2011	RJC	RW
2		MODIFIED -1 TO WORK WITH COUPLING, ADDED COUPLING, TUBE, AND CAPS, DELETED CRIMP HOSE CLAMP AND LABEL. CH'D HOSE FROM Ø5/8 TO Ø1/2.	7/27/2012	JAG	SE
3		-1 CH'D O.D. PROFILE WAS (8XR.165) IS (6X R.375), SLOT DIM WAS .119 IS .119 +.005/-.000.	2/26/2013	BIM	GE
3A		-9 CH'D DIM WAS 3.78 IS 3.68. -13 CH'D MATERIAL TO NEW PIG CORP. #PAD210. -1 CH'D DIM WAS .020 IS .02, WAS Ø.250 THRU IS Ø.25 THRU. DELETED 6X .106, .082. CH'D NOTE WAS 6X R.375 EQUALLY SPACED IS 6X R.38 EQUALLY SPACED ON Ø1.60 B.C.	2/5/2014	DPD	RW
4	16-0066	UPDATED TO NEW STANDARD. -1 CH'D DIMS WAS Ø.729 +.000-.002 IS Ø.727 +.000-.002, WAS 2X Ø.494 +.000-.002 IS 2X Ø.492 +.000-.002. -3 CH'D B/O INFO WAS #90145A433 IS #9263K297.	6/30/2016	RJC	SM
5	17-0077	-3 CH'D B/O INFO WAS Ø12mm ID x 2mm WIDTH (MCMaster-CARR # 9263K174) IS Ø10mm ID x 2mm WIDTH (MCMaster-CARR # 9263K174)	3/30/2017	SM	JAG

DART AEROSPACE	
TITLE	
IGB & TGB OIL DRAIN TOOL	
DWG NO.	
RBW7839-2G	
REV	
5	
MAT'L	
HEAT TREAT FINISH	
SPEC	
DRAWN BY: PERRITT	
CHECKED: DUERFELDT	
OPPS APPR: ANDERSON	
QA APPR: LINDSAY	
APPROVED: MACKOVJAK	
SCALE 1:3	
DATE 11/12/2008	
SHEET 1 OF 3	

UNLESS OTHERWISE SPECIFIED	
DIMENSIONS ARE IN INCHES	
.XXX ± .005	FRACTIONS ± 1/8
.XX ± .01	ANGLES ± .5°
.X ± .1	SURFACES = 125°
1. BREAK ALL SHARP EDGES .015 x 45° OR .015R	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
USED ON MODEL	
AW139	

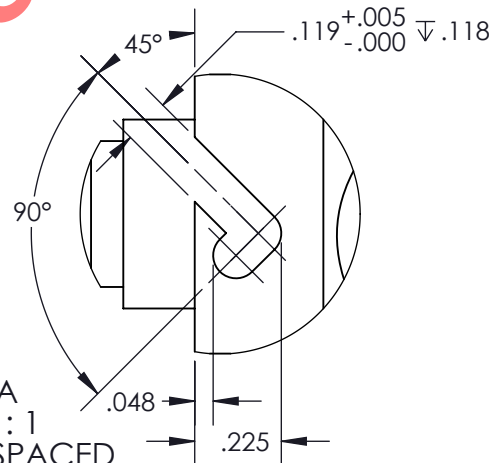
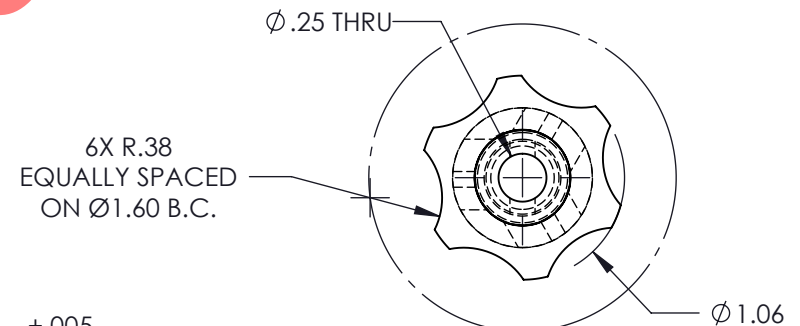
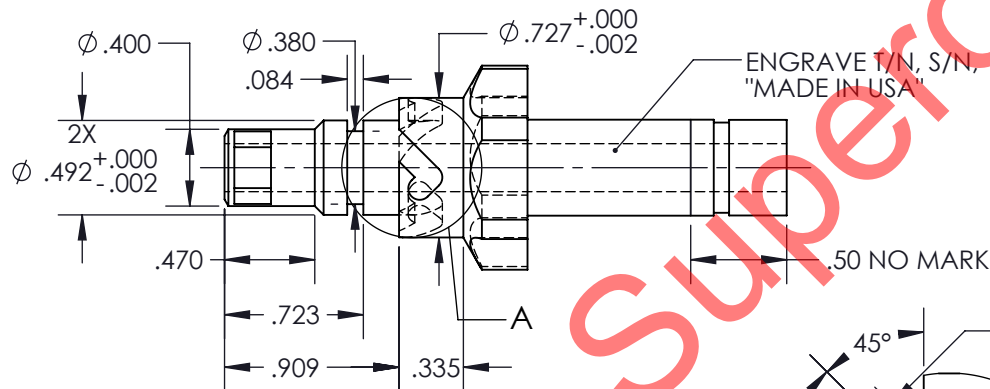
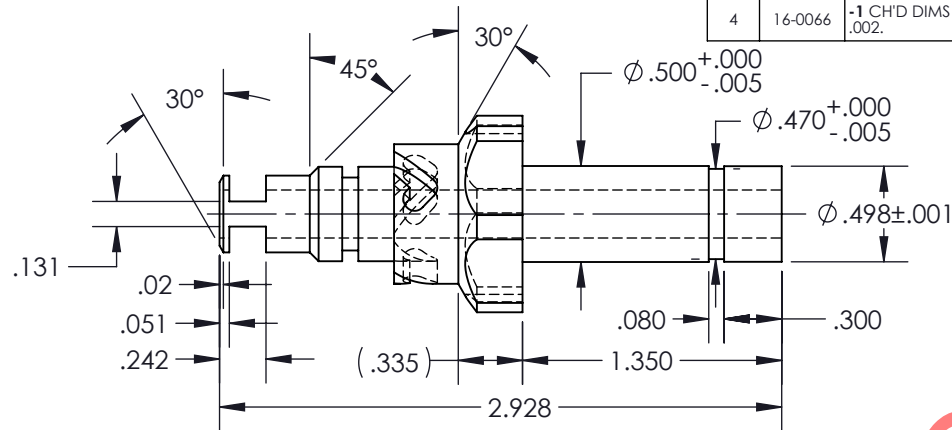
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**SEE ATTACHED DEVIATION**

**UNDER REVIEW**

URF 19-583 19.02.13 (VM)

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		CH'D TITLEBLOCK & REV BLOCK, CH'D T/N FROM RBW7839, CH'D INK STAMP NOTE, -1 CH'D ANGLE OF GROOVE PER G.E.	8/20/2009	RJC	RW
1A		CH'D TOOL NAME FROM MAIN GEAR BOX DRAIN TOOL PER E.B.	11/28/2011	RJC	RW
2		MODIFIED -1 TO WORK WITH COUPLING, ADDED COUPLING, TUBE, AND CAPS, DELETED CRIMP HOSE CLAMP AND LABEL. CH'D HOSE FROM Ø5/8 TO Ø1/2.	7/27/2012	JAG	SE
3		-1 CH'D O.D. PROFILE WAS (8X R.165) IS (6X R.375), SLOT DIM WAS .119 IS .119 +.005/- .000.	2/26/2013	BIM	GE
3A		-9 CH'D DIM WAS 3.78 IS 3.68. -13 CH'D MATERIAL TO NEW PIG CORP. #PAD210. -1 CH'D DIM WAS .020 IS .02, WAS Ø.250 THRU IS Ø.25 THRU. DELETED 6X .106, .082. CH'D NOTE WAS 6X R.375 EQUALLY SPACED IS 6X R.38 EQUALLY SPACED ON Ø1.60 B.C.	2/5/2014	DPD	RW
4	16-0066	-1 CH'D DIMS WAS Ø.729 +.000-.002 IS Ø.727 +.000-.002, WAS 2X Ø.494 +.000-.002 IS 2X Ø.492 +.000-.002.	6/30/2016	RJC	SM



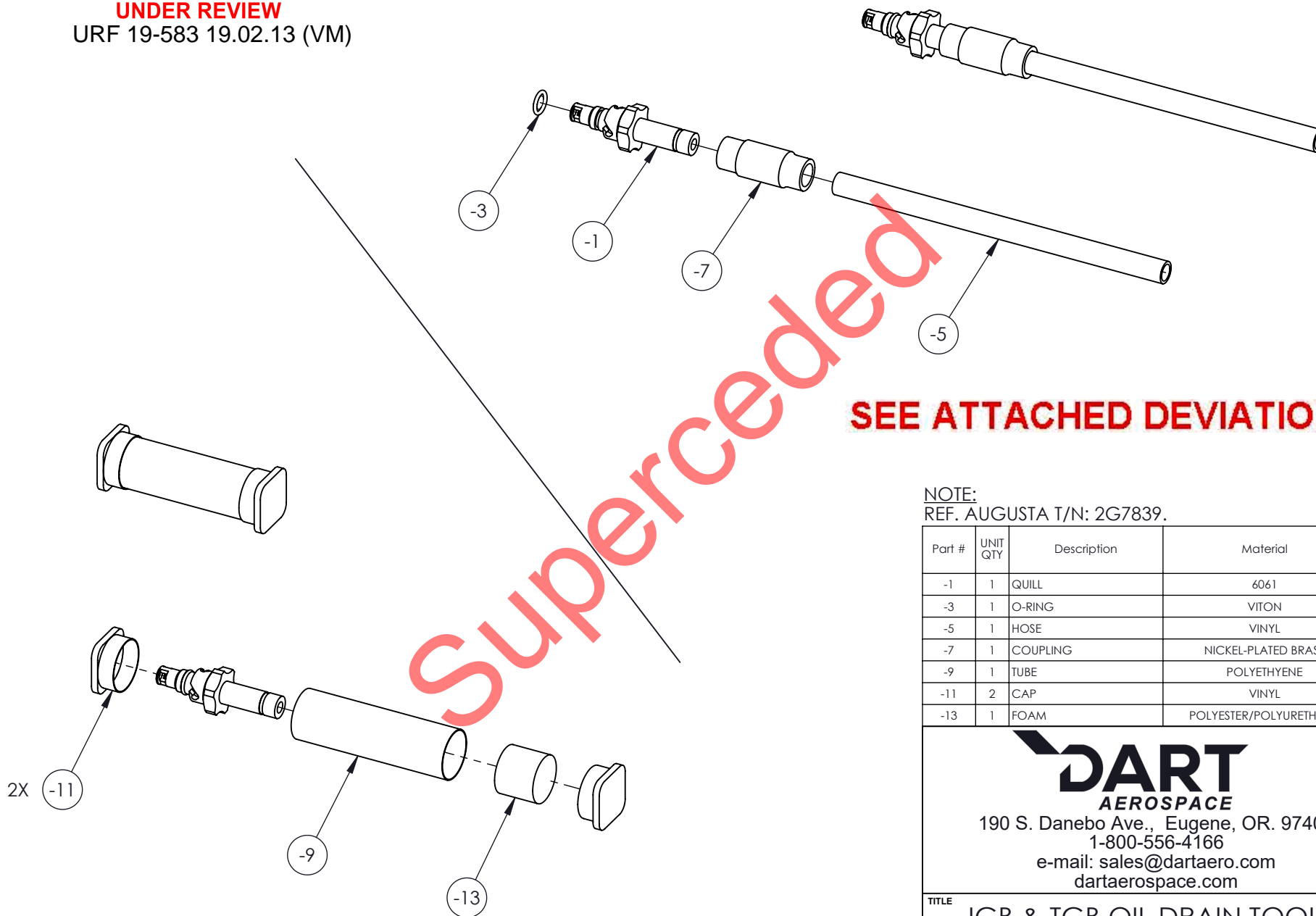
①  
QUILL

DETAIL A  
SCALE 2 : 1  
3X EQUALLY SPACED

<b>DART AEROSPACE</b>	
TITLE <b>IGB &amp; TGB OIL DRAIN TOOL</b>	
DWG NO. <b>RBW7839-2G-1</b>	REV <b>5</b>
MAT'L 6061	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
HEAT TREAT	.XXX ± .005 FRACTIONS ± 1/8
FINISH RED ANODIZE	.XX ± .01 ANGLES ± .5°
SPEC MIL-A-8625F, TYPE II, CLASS II	.X ± .1 SURFACES = 125/✓
DRAWN BY: PERRITT	1. BREAK ALL SHARP EDGES .015 x 45° OR .015R
CHECKED: DUERFELDT	2. DIMENSIONAL LIMITS APPLY AFTER PLATING
OPPS APPR: ANDERSON	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
QA APPR: LINDSAY	USED ON MODEL
APPROVED: MACKOVJAK	AW139
SCALE 1:1	DATE 11/12/2008
SHEET 2 OF 3	

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**UNDER REVIEW**  
URF 19-583 19.02.13 (VM)



NOTE:  
REF. AUGUSTA T/N: 2G7839.

Part #	UNIT QTY	Description	Material
-1	1	QUILL	6061
-3	1	O-RING	VITON
-5	1	HOSE	VINYL
-7	1	COUPLING	NICKEL-PLATED BRASS
-9	1	TUBE	POLYETHYLENE
-11	2	CAP	VINYL
-13	1	FOAM	POLYESTER/POLYURETHANE

**DART**  
**AEROSPACE**

190 S. Danebo Ave., Eugene, OR. 97402  
1-800-556-4166  
e-mail: sales@dartaero.com  
dartaerospace.com

TITLE IGB & TGB OIL DRAIN TOOL			
DWG NO. RBW7839-2G	REV 5	CUSTOMER 1 OF 1	
SCALE 1:3	DATE 11/12/2008	SHEET	3 OF 3

Entered: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. \_\_\_\_\_

Route update only ☐

Job: _____  Part No. <u>RBW7839-2G Rev. 5</u>		<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/>		<b>DEPARTMENT/PROCESS</b>  <div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/>            Machining <input type="checkbox"/>            Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/>            Small Fab <input type="checkbox"/>            Finishing <input type="checkbox"/> </div> <div>           Eng. (Non-AW) <input type="checkbox"/>            Prod. Eng. Coord. <input type="checkbox"/>            Rec/Store/Packaging <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/>            Water Jet <input type="checkbox"/>            Supplier Quality <input type="checkbox"/> </div> </div>				
Date :		Sequence #:		QTY Affected :		<b>MRB (QSI042)</b>  Oct 30, 2018		
<b>Description Work Order Deviation</b>				<b>Disposition</b>				
Kuri-Tech Hose (K010-0608) easily pulls out of Coupling (McMaster Carr 51495K116)				Install a 1.0" long, 0.38" OD, 0.25" ID piece of Stainless Steel into one end of the Kuri-Tech Hose until flush.  Attach the modified end of the Kuri-Tech Hose to the Coupling before placing tool into packaging (if applicable).  This deviation is acceptable.  The fit, form and function of the part will be as originally intended.				<b>Completed By</b>
								<b>Lead hand / Supervisor</b>
								<b>QC / QA Coordinator</b>
<b>Root Cause</b>  Operator <input type="checkbox"/> Manufacturing Process <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Handling/Presservation <input type="checkbox"/> Material <input type="checkbox"/> Product Improvement <input checked="" type="checkbox"/> X Process Improvement <input type="checkbox"/> Human Factors <input type="checkbox"/>		<b>FAULT CATEGORY</b>  <div style="display: flex; justify-content: space-between;"> <div> <input type="checkbox"/> Pressure/Forced  <input type="checkbox"/> Bending  <input type="checkbox"/> Crushing  <input type="checkbox"/> Cracks  <input type="checkbox"/> Crimp/Kink/Ripple/Wave/Twist  <input type="checkbox"/> Marks/Chatter  <input type="checkbox"/> Mislabeled         </div> <div> <input type="checkbox"/> Contamination  <input type="checkbox"/> Misaligned/off center  <input type="checkbox"/> BOM/Route  <input type="checkbox"/> Broken/Damage/Defect  <input type="checkbox"/> Incomplete/Unclear Instructions  <input type="checkbox"/> Drill Holes  <input type="checkbox"/> Fit/Function         </div> <div> <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Folio/Program  <input type="checkbox"/> Grain Direction  <input type="checkbox"/> Weld  <input type="checkbox"/> Wrong Stock Pulled  <input type="checkbox"/> Out of Sequence  <input type="checkbox"/> Off-set/Set-up         </div> <div> <input type="checkbox"/> Positioned Wrong  <input type="checkbox"/> Outside Tolerance  <input type="checkbox"/> Drawing  <input type="checkbox"/> Finish  <input type="checkbox"/> Part Lost/Missing  <input type="checkbox"/> Misread         </div> </div>						
Other/Details:								

URF 19-583 19.02.13 (VM)